1		TABLE OF CONTENTS	
2		Ţ	Page
3	1.	AUTOMATED METER READING ("AMR")	. 13
4		(a) Saturated AMR	. 13
5		(b) Strategic AMR	. 16
6	2.	INTELLIGENT ROUTING AND INFORMATION SYSTEM HANDHELD	
7		DEVICE REPLACEMENT	. 20
8	3.	REACTIVE POWER PROGRAM	. 23
9		(a) Reactive Power Metering	. 23
10		(b) Conversion to Coincident Demand Billing	. 33
11	4.	METER DATA MANAGEMENT SYSTEM ("MDMS")	. 36
12	5.	CALL CENTER IMPROVEMENTS	. 39
13	6.	CUSTOMER SERVICE SYSTEM IMPROVEMENTS	. 40
14	7.	OFF-SYSTEM BILLING	. 47
15	8.	COMPETITIVE MARKET CUSTOMER SERVICE SYSTEMS	. 54
16	9.	ON BILL RECOVERY PROGRAM	. 57
17	10	.ELECTRONIC PAYMENT PROCESSING	. 59
18	CU	STOMER SERVICE PERFORMANCE MECHANISM	. 62
19	LO	W INCOME PROGRAM	. 63
20	OU'	TREACH	. 68
21	MAI	NDATORY HOURLY PRICING EXPANSION	. 82

- 1 O. Would the members of the Customer Operations Panel
- 2 please state their names and business addresses?
- 3 A. Andrew G. Wood, Joanna Wolff, Janet Nevin, Richard
- 4 McKnight and Alfred Frederiksen. The business address
- of Mr. Wood, Ms. Nevin and Mr. Frederiksen is 4 Irving
- 6 Place, New York, NY 10003; the business address of Mr.
- 7 McKnight is 30 Flatbush Avenue, Brooklyn, NY 11217;
- 8 and the business address of Ms. Wolff is 88-11 165<sup>th</sup>
- 9 Street, Queens, NY 11432.
- 10 Q. By whom are the Panel members employed?
- 11 A. We are employed by Consolidated Edison Company of New
- York, Inc. ("Con Edison" or the "Company").
- 13 Q. In what capacity are the panel members employed and
- what are their professional backgrounds and
- 15 qualifications?
- 16 A. (Wood) I am General Manager of Strategic Applications.
- 17 I have been employed by Con Edison since 1972. My
- 18 current responsibilities include oversight of various
- operating components: the Final Bills collection
- group, Public Assistance processing group, and the
- 21 replevin processing group. My organization also
- 22 provides subject matter expertise and operational
- support in the areas of system design and

1	implementation, metering and billing systems,
2	credit/collections, and Management Information Systems
3	reporting. I have held positions of increasing
4	responsibility in Customer Operations during the past
5	40 years. From 1972 to 2009, I have held operating
6	positions in all the functional areas of Customer
7	Operations, including the Division Manager of Customer
8	and Commercial Operations, Section Manager of Customer
9	Operations Central Staff, Department Manager of Stater
10	Island Customer Operations, and Branch Manager. From
11	1999 to the present, I have served as General Manager,
12	Strategic Applications, on Central Staff. Before I
13	joined Con Edison, I earned a Bachelor of Science
14	degree in Economics from Siena College in 1969. From
15	1969 to 1971, I served as an officer in the United
16	States Army. I earned a Master of Business
17	Administration ("MBA") in Business Management from
18	Fairleigh Dickinson University in 1986. I attended
19	Company-sponsored training, including the Executive
20	Management Development course at the Fuqua School of
21	Business, Duke University, Durham, N.C.
22	(Wolff) I am the General Manager of Field Operations
23	in Customer Operations. I am responsible for meter

1	reading and field collections throughout the service
2	territory. I am also responsible for theft-of-service
3	investigations and the Field Operations Performance
4	Management Group. I have been employed by Con Edison
5	for 34 years and have held a variety of management
6	positions within Con Edison. I have worked in
7	Customer Operations since 1996 in the positions of
8	Section Manager at the Rye Call Center and General
9	Manager, Westchester Customer Operations. I became
10	the General Manager of Field Operations South in 2006.
11	Prior to joining Customer Operations, I held the
12	positions of: General Manager, Operations Analysis;
13	Director of the Learning Center; Assistant to the
14	Executive Vice President, Central Operations;
15	Administrative Manager, Nuclear Power; and Personnel,
16	Safety Training Manager, Power Generation Maintenance.
17	I was hired into the Company in 1978 as an Associate
18	Analyst and worked at various generating stations and
19	Power Generation Services as a Personnel Supervisor
20	and Operating Supervisor. I earned a Bachelor's
21	Degree from Queens College in Economics and Secondary
22	Level Education in 1977 and a Master of Science in
23	Business Management from Mercy College in 1998. I

1	also attended Company-sponsored training, including
2	Executive Management Development courses at the Fuqua
3	School of Business, Duke University, in 1988, and Tuck
4	Business School at Dartmouth College in 1990.
5	(McKnight) I am General Manager of the Customer
6	Assistance group in Customer Operations. My group
7	includes the Company's Call Center, back office
8	functions including billing, credit operations and
9	customer investigations, as well as the Company's
10	Walk-in Centers. I have been employed by Con Edison
11	for 34 years and have held a variety of positions
12	within Customer Operations, in addition to a position
13	early in my career in the Accounting Research and
14	Procedures section of the Accounting Department. The
15	Customer Operations positions held prior to my current
16	position include the General Manager of Specialized
17	Activities, Section Manager of the Corporate Customer
18	Group and Branch Manager. I joined Con Edison as a
19	Customer Service Representative while earning my
20	Bachelor of Science degree in Accounting from Long
21	Island University. I also have an MBA in Executive
22	Management from St. John's University.

1	(Nevin) I am the Section Manager of Quality Assurance
2	in Specialized Activities which includes the Corporate
3	Customer Group, Retail Choice Operations, Executive
4	Action Group, Unmetered and Meter Services, Meter Data
5	Management Team, and Telecom Applications. I have held
6	this position since 2009. I have been employed by Con
7	Edison for 29 years. Joining the Company in 1983 as a
8	management intern, I have held positions of increasing
9	responsibility. The Customer Operations positions held
10	prior to my current position include: Section Manager
11	in Call Center, Senior Specialist in Call Center &
12	Quality Assurance, and Supervisor in various Customer
13	Operations departments. I have a Bachelor of Arts
14	degree in English and Political Science and an MBA in
15	Finance from Iona College, New Rochelle, NY.
16	(Frederiksen) I am the Department Manager for Customer
17	Outreach and Education. I have held this position
18	since 2011. I joined Con Edison as the Section
19	Manager in Customer Assistance in 2009. Prior to
20	working for Con Edison, I was employed by Verizon
21	where I held several positions in customer operations,
22	software engineering and process improvement. Prior
23	to joining Verizon, I held positions in multi-cultural

area marketing, human resources and training and

1

development. I have a Bachelor of Science in Business 2 3 Management from the State University of New York -4 Empire State College and an MBA from C.W. Post-Long 5 Island University. 6 Have you previously submitted testimony or testified Q. before the New York State Public Service Commission? 7 8 Α. All of the panel members, except Ms. Nevin and Mr. 9 Frederiksen, have either submitted testimony or 10 testified in previous cases. 11 What is the purpose of the Panel's testimony? Ο. 12 Our testimony describes a number of important Α. customer-service related programs that include capital 13 14 programs needed to support customer care and comply 15 with regulatory requirements and other programs that 16 support the Company's efforts to provide information and education to its customers and address the needs 17 18 of customers receiving public assistance. testimony also provides information on the Customer 19 20 Service Performance Mechanism and the Company's 21 Mandatory Hourly Pricing ("MHP") program. In total, the Company projects to spend \$39.5 22 million in 2013, \$32.4 million in 2014, \$28 million in 23

1 2015, \$26.2 million in 2016 and \$28.5 million in 2017 on customer-service related capital programs. 2 3 projects increased O&M spending of \$1.7 million for 4 the rate year (January 1, 2014 - December 31, 2014). 5 For the two succeeding 12-month periods ending 6 December 31, the Company projects O&M spending of \$1.7 million in 2015 and \$1.9 in 2016. 7 8 Please summarize your testimony. Ο. 9 Α. The Company's testimony addresses a number of 10 customer-service related efforts that the Company 11 plans to continue or to undertake over the next 12 several years. These include capital programs, and other programs as described below. 13 14 1. Automated Meter Reading ("AMR") - The Company plans 15 the continued deployment of AMR under two initiatives: 1) "Saturated AMR", and 2) "Strategic 16 17 AMR." Saturated AMR involves the installation of 18 AMR in The Bronx and other areas at a cost of \$87.7 million through 2017. Strategic AMR is the 19 deployment of AMR in locations where conventional 20 21 meter reading yields poor results and to replace obsolete remote meter reading devices for a cost of 22 \$7.46 million through 2017. 23

1	2. Intelligent Routing and Information System Handheld
2	Device Replacement - The Company plans to spend \$1.2
3	million for the deployment of new handheld devices
4	for field operations to replace the current handheld
5	devices that will not be supported beyond 2013.
6	3. Reactive Power Metering - The Company plans the
7	continued installation of metering and
8	communications equipment to support the billing of
9	customers under the Company's reactive power
10	program. The capital cost of this program through
11	2014 is \$7.5 million. O&M costs associated with
12	this program are \$1.9 million for the rate year and
13	\$2.1 million and \$2.2 million for the two succeeding
14	12-month periods ending December 31, 2015 and 2016,
15	respectively.
16	4. Meter Data Management System ("MDMS") - The Company
17	plans to spend \$5.3 million through 2017 for the
18	installation of upgraded components for the MDMS,
19	including upgrades of hardware and system software.
20	The MDMS provides support for the billing of
21	customers under MHP and the Reactive Power program.
22	This work is necessary to update system software
23	with changes made by the vendor. This project also

1		involves installation of an additional server to
2		support the increased numbers of interval-metered
3		accounts and requirements associated with the MHP,
4		RP and demand response ("DR") programs.
5	5.	Call Center Improvements - The Company plans to
6		spend \$3.4 million on capital costs associated with
7		the completion of Call Center Improvements in 2013.
8		An increase of \$169,000 in O&M costs associated with
9		this program will be experienced in the twelve-month
LO		period ending December 31, 2015.
L1	6.	Customer Service System ("CSS") Improvements - The
L2		Company plans to make improvements to its CSS to
L3		enable its continued operation and support of
L 4		customer care business processes. The costs for CSS
L5		improvements are \$25 million through 2017.
L6	7.	Off-System Billing - The Company is in the process
L7		of migrating the off-system billing applications to
L8		a common automated customer care and billing
L9		application that will support these billing
20		activities and provide automation of these
21		processes. Through 2017, the projected cost of
22		these efforts is \$6.4 million.

1	8. Competitive Market Customer Service Systems - The
2	Company plans to make improvements that are needed
3	to the systems that support customer choice to
4	better facilitate customer care functions. Through
5	2017, the cost of these efforts is projected to be
6	\$5.1 million.

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9. On-Bill Recovery ("OBR") Program - The Company has been ordered to provide billing and collections services in support of the New York State Energy Research and Development Authority's ("NYSERDA") loan program for qualifying residential and nonresidential customers who install energy efficiency measures on their property under the Green Jobs -Green New York Loan Installment Program pursuant to the Power NY Act of 2011 (L.2011, c. 388). Installments for such loans are shown on, and collected through, the customer's utility bill. То implement the billing and collection of loan installments on customer bills, the Company had to develop and implement system modifications and new business processes. Work involved modifications to the Company's CSS to support the automation of various processes associated with OBR. The Company

plans to spend an additional \$0.5 million in 2013 to 1 complete system work. In addition, the Company 2 3 hired a Senior Specialist to administer this program 4 at a cost of \$100,000. 10. Electronic-Payment Processing - The Company plans 5 6 to spend \$1.4 million through 2014 to develop a 7 system application to process payments received from customers electronically ("electronic payments"). 8 9 0. Are some of your programs applicable to both Electric 10 and Gas services? 11 We note that our testimony describes the total Α. 12 costs of common programs. The Electric and Gas 13 Accounting Panels describe the allocation of these 14 costs between electric and gas service. 15 Does your testimony address any other topics? Ο. 16 Α. Yes. Our testimony also addresses Customer 17 Operations' cultural initiatives with respect to the 18 Management Audit, the Customer Service Performance Mechanism, Low Income Program, Outreach, and MHP 19 Program Expansion. 20 Describe how the Company's response to the cultural 21 Ο. 22 barrier identified in the Management Audit affected

the way you conduct your operations.

23

The Company's cultural imperatives drive the way we do 1 Α. 2 business. It is necessary for us to be open, fair, 3 trusted and trusting to our customers, employees and 4 stakeholders and to engage them in every aspect of our 5 business in order to gain the customer information and 6 insights that we need to sustain quality customer 7 In addition, with an imperative to manage care. 8 customer costs, we strive to engage all our employees, 9 both management and weekly, in seeking and developing 10 cost savings initiatives. 11 AUTOMATED METER READING ("AMR") 1. 12 (a) Saturated AMR Please describe Con Edison's proposed Saturated AMR 13 Q. 14 program. The Company refers to the deployment of AMR as 15 16 "saturated AMR" when AMR technology is installed on 17 every meter in a large target area. The Company 18 completed its project to deploy saturated AMR throughout Westchester County in 2010. This project 19 20 produced excellent results, including reduced 21 operating costs and improved meter reading performance. To maximize these benefits, the Company 22 plans to continue the saturated installation of AMR at 23

- locations in its service territory that produce a
- 2 positive business case.
- 3 Q. Please describe in more detail the Company's plan for
- 4 the saturated installation of AMR.
- 5 A. Beginning in 2011, the Company began saturated
- 6 deployment of AMR meters and devices in the eastern
- 7 portion of The Bronx ("Bronx East"). Of the 275,000
- 8 electric and gas meters in Bronx East where AMR will
- 9 be deployed under this program, the Company installed
- 10 120,000 meters and devices in 2011 at a cost of \$16
- 11 million. During 2012, the Company plans to install
- approximately 100,000 meters at a projected cost of
- 13 \$15.6 million. The Company plans to complete the
- 14 Bronx East project in 2013 by installing the remaining
- 15 meters at a cost of approximately \$6 million.
- 16 Starting in 2013, once the Bronx East project is
- 17 completed, the Company plans to begin saturated
- 18 deployment of AMR meters and devices in the rest of
- The Bronx ("Bronx West"), which has more than 450,000
- 20 electric and gas meters and will require approximately
- 4 years to complete. Anticipated funding requirements
- 22 for Bronx West are: 2013 \$11.9 million, 2014 -
- 23 \$17.5 million, 2015 \$18.1 million, 2016 \$17.1

- 1 million, and 2017 \$5.7 million. In 2017, the
- 2 Company also plans to spend an additional \$11.4
- 3 million to begin deployment of Saturated AMR in areas
- 4 outside of The Bronx.
- 5 Q. How will the Company select the areas for saturated
- 6 deployment of AMR following completion of The Bronx
- 7 projects?
- 8 A. As in the past, the Company will evaluate each AMR
- 9 expansion project individually and conduct a cost-
- 10 benefit analysis. The Company will deploy AMR
- 11 projects in areas where there is a positive business
- 12 case.
- 13 Q. Does the Company expect to reduce staffing as a result
- of the installation of saturated AMR in Bronx East and
- West?
- 16 A. Yes, the Company continues to reduce Customer Field
- 17 Representative ("CFR") staffing levels as a result of
- 18 the installation of saturated AMR, and also expects
- reductions in other staffing levels. When the Bronx
- 20 East project is completed, the Company estimates that
- staffing will be reduced by 32.5 CFR full time
- 22 equivalents ("FTEs"), 4.5 Customer Service
- 23 Representative ("CSR") FTEs and two supervisors, for a

1 savings of approximately \$1.9 million: \$1.5 million in the rate year and \$400,000 in the succeeding 12-2 3 month period ending December 31, 2015. For Bronx 4 West, when completed, the Company projects a reduction of approximately 40 CFR FTEs, for an estimated savings 5 6 of \$3.8 million. 7 Are similar savings expected from other saturated Ο. deployments of AMR outside The Bronx? 8 9 Α. Yes. 10 Have you prepared, or had prepared under your Q. 11 supervision, exhibits that detail the Saturated AMR 12 implementation? We have prepared two exhibits. These are 13 Α. Yes. 14 entitled "AUTOMATED METER READING SATURATION," 15 Exhibit\_\_\_(CO-1), and "AUTOMATED METER READING 16 SATURATION SAVINGS, " Exhibit\_\_\_\_(CO-2). MARK FOR IDENTIFICATION AS EXHIBIT\_\_\_(CO-1) and 17 18 EXHIBIT\_\_\_(CO-2) 19 Strategic AMR (b) 20 Please summarize Con Edison's planned strategic AMR Q. 21 program. The Company plans to continue to utilize AMR at 22 23 locations where conventional meter reading yields poor

1 results and to replace obsolete remote meter reading devices in locations where one or more of these meters 2 3 have failed. In its Orders in Cases 09-E-0428 and 09-G-0795, the Commission adopted Joint Proposals that 4 5 reflect capital spending on these projects in the 6 Company's current electric and gas rate plans. 7 those proceedings, the Company proposed to replace 3,500 meters per year where there was a reported 8 failure of obsolete remote devices at customer 9 10 locations and for the deployment of 3,500 AMR 11 installations per year to address the most difficult 12 of the hard-to-read meters. Each project was projected to cost \$500,000 during each rate year. 13 14 project that the approximate target spending amount will have been reached by the end of the respective 15 16 rate plans. What are the benefits of installing AMR at these 17 Ο. 18 locations? AMR overcomes the difficulties associated with reading 19 Α. 20 hard-to-read meters, including cases where customers 21 are unavailable to provide access to their meters or where there is restricted access due to meter 22 location. Additionally, AMR reduces injuries 23

- 1 associated with manual meter reading (slips, trips and
- 2 falls) during inclement weather and the normal course
- The Company currently has over 900,000 AMR
- 5 devices in use throughout the service area, and AMR
- functionality and performance are well documented.
- 7 The Company has been strategically deploying AMR for a
- 8 number of years, and field organizations are already
- 9 equipped with devices capable of collecting readings
- 10 from AMR meters.
- 11 Q. What is the total cost of the strategic AMR program
- 12 proposed by the Company?
- 13 A. Anticipated capital funding requirements for this
- 14 program are: 2013 \$1.1 million, 2014 \$1.7
- 15 million, 2015 \$1.6 million, 2016 \$1.5 million and
- 16 2017 \$1.5 million.
- 17 Q. Please describe Con Edison's plans for AMR deployment
- 18 to replace existing hard-wired remote meter
- installations in locations where one or more of these
- 20 meters has failed.
- 21 A. The Company has been deploying AMR to replace hard-
- 22 wired remote meter reading installations in locations
- where one or more of these meters have failed. There

1 are currently 53,704 of these devices on the Company's system, all of which the Company plans to replace. 2 3 Since 2009, the Company has replaced approximately 4 39,000 of these devices. The Company plans to continue to replace these obsolete meters and to 5 6 deploy approximately 6,000 AMR installations per year 7 in this effort. Anticipated funding requirements for this program are: 2013 - \$600,000, 2014 - \$1.1 8 million, 2015 - \$1 million, 2016 - \$900,000 and 2017 -9 10 \$900,000. 11 Please describe Con Edison's plans for AMR deployment Ο. 12 to replace hard-to-read meters. The Company has been deploying AMR equipment at 13 Α. 14 locations and meter reading routes where conventional 15 meter reading yields poor results. The meters 16 targeted for replacement are those that are regularly 17 inaccessible on the meter reading day and generally 18 require that a meter reader expend more than the average time to obtain readings, and the overall rate 19 of meter reading is low. The installation of AMR 20 21 equipment for such meters or routes provides customers 22 with actual meter readings.

1		At present, there are about 120,000 Company
2		meters where the Company has been unable to gain
3		access for 120 days or more. Continued funding for
4		meter replacement will provide the Company with the
5		means to address the most difficult of the hard-to-
6		read meters. The Company is planning to deploy
7		approximately 3,500 AMR installations per year to
8		address hard-to-read meters. Anticipated funding
9		requirements for this program are: 2013 - \$500,000,
10		2014 - \$600,000, 2015 - \$600,000, 2016 - \$600,000 and
11		2017 - \$600,000.
12	Q.	Have you prepared, or had prepared under your
13		supervision, exhibits that detail the deployment of
14		AMR at strategic locations.
15	A.	Yes. We have prepared two exhibits. These are
16		entitled "STRATEGIC AMR," Exhibit(CO-3), and
17		"STRATEGIC AMR WORKSHEET," Exhibit(CO-4).
18		MARK FOR IDENTIFICATION AS EXHIBIT(CO-3) and
19		EXHIBIT(CO-4)
20 21 22		2. INTELLIGENT ROUTING AND INFORMATION SYSTEM HANDHELD DEVICE REPLACEMENT
23	Q.	Please describe the Company's initiative to replace
24		the handheld devices used in conjunction with the
25		Intelligent Routing and Information System used to

- 1 manage non-routine meter reading and collections field
- 2 activities?
- 3 A. The current handheld devices rely upon a public
- 4 wireless communications network for support. The
- 5 vendor of this network notified its users that the
- 6 communication network and cell sites will be phased
- out in 2013. Once the network is phased out, the
- 8 current handhelds will no longer be able to
- 9 communicate. Based on this information, the Company
- 10 planned to deploy the handheld replacements during
- 11 2013. Early in 2012, the Company noticed a marked
- decrease in its ability to communicate with field
- crews and learned that the vendor had already shut
- down approximately 30% of its network. As a result,
- the Company moved up deployment and completed the
- 16 replacement of the handheld devices during 2012.
- 17 Q. Describe the work required to replace the current
- 18 handheld devices.
- 19 A. Replacement of the handheld devices involved the
- 20 purchase of 355 new handheld devices and a docking
- 21 station and printers.
- 22 Q. What did it cost to replace the handheld devices?

- 1 A. The capital cost of replacing the handheld devices was
- 2 \$923,000, originally projected to be spent in 2013.
- 3 However, as noted above, the Company completed this
- 4 project in 2012. There is no projected change in O&M
- 5 costs associated with replacement or future operation
- of the handheld devices.
- 7 Q. Did the Company plan any other work associated with
- 8 the handheld devices?
- 9 A. Yes. The Company had planned to replace its current
- 10 collection receipt printers during 2014 but
- 11 accelerated and completed the replacement in 2012.
- 12 These printers provide a receipt to customers for
- payments taken in the field by our CFRs that work as
- 14 collectors.
- 15 Q. Why were new printers needed?
- 16 A. These printers were close to 10 years old and were
- 17 beginning to fail. These printers were needed so that
- 18 customers receive a receipt when making a payment to a
- 19 CFR.
- 20 Q. What did it cost to replace the collection receipt
- 21 printers?
- 22 A. The capital cost of replacing the collection receipt
- printers was \$141,000, originally projected to be

1		spent in 2014. However, as noted above, the Company
2		accelerated deployment of these printers and completed
3		replacement of the printers during 2012.
4	Q.	What was the total cost of this program?
5	A.	The total cost of this program (for the handheld
6		devices and the printers) was \$1.1 million dollars.
7	Q.	Have you prepared, or had prepared under your
8		supervision, an exhibit that details the handheld
9		devices replacement?
10	A.	Yes. We have prepared two exhibits. These are
11		entitled "INTELLIGENT ROUTING AND INFORMATION SYSTEM
12		HANDHELD DEVICE REPLACEMENT," Exhibit(CO-5), and
13		"INTELLIGENT ROUTING AND INFORMATION SYSTEM HANDHELD
14		DEVICE REPLACEMENT WORKSHEET, " Exhibit(CO-6).
15		MARK FOR IDENTIFICATION AS EXHIBIT(CO-5) and
16		EXHIBIT(CO-6)
17		3. REACTIVE POWER PROGRAM
18		(a) Reactive Power Metering
19	Q.	Pursuant to the Commission's September 22, 2009 Order
20		Adopting Reactive Power Tariffs with Modifications in
21		Case 08-E-0751, Proceeding on Motion of the Commission
22		to Identify the Sources of Electric System Line Losses
23		and the Means of Reducing Them ("Reactive Power

- Order"), the Company filed with the Commission
- 2 reactive power tariff provisions and an implementation
- 3 plan for its Reactive Power Program (the "Plan"). Has
- 4 the Company implemented this plan?
- 5 A. Yes, the Company has been implementing the Plan by
- 6 installing VAR-capable meters and communications
- 7 equipment to support the billing of customers under
- 8 the reactive power billing rate.
- 9 Q. Please describe the schedule for initiating reactive
- 10 power charges as set forth in the Plan.
- 11 A. Effective October 1, 2010, induction generators with
- nameplate capacities of 1000 kW or greater and
- customers whose demand in any two of the previous
- twelve months was 1000 kW or greater would be subject
- 15 to reactive power charges. Effective October 1, 2011,
- induction generators with nameplate capacities of 500
- 17 kW or greater and customers whose demand in any two of
- 18 the previous twelve months was 500 kW or greater would
- 19 be subject to the charges.
- 20 Q. Please describe the schedule for installing metering
- 21 and communications equipment for the Program as set
- 22 forth in the Plan.

The Plan anticipated the Company's installing 7,980 1 Α. 2 meters and associated communications equipment, with 3 the meters for the 4,880 meters associated with the 4 793 customers having demand over 1500 kW being 5 replaced during the period April 2010 through December 6 2013. In its July 5, 2012 Plan update filing, the 7 Company informed the Commission that nearly 5,000 VARcapable meters and remote communications had been 8 installed to date, including installations for all 9 10 customers with demands under 1500 kW, and that the 11 balance would be installed and operational for all 12 targeted customers by year-end 2014, rather than 2013. 13 Why did the Company need to update its plan and extend Q. 14 the anticipated time for meter installation to year-15 end 2014? 16 Α. As discussed in the July 5, 2012 Plan update, 17 implementation efforts were subject to several severe 18 weather-related delays, which either made travel and access to customer sites difficult or required the 19 20 redirection of Company field forces from installing 21 reactive power meters to responding to emergencies. 22 Also, Verizon's six-week work stoppage and recovery 23 period significantly slowed down the installation of

1	phone lines, which in turn impacted the Company's
2	ability to install the required VAR meters.
3	Additionally, Smart Synch, a vendor that was providing
4	a digital cellular communication gateway (one
5	alternative to land-line communications), informed the
6	Company that it would no longer produce or support the
7	gateway devices that Con Edison was deploying. In
8	addition, Sprint Nextel advised the Company that it
9	would discontinue its iDEN wireless network, the
10	network that the Company was using in conjunction with
11	Smart Sync, in 2013. This affects all sizes of
12	customers that had reactive power meters installed.
13	As a result of the Sprint Nextel and Smart Synch
14	changes, not only does the Company now need to
15	implement an alternative hardware solution, the
16	Company is also in the process of replacing the
17	communications for approximately 1,000 already
18	installed meters in order to avoid an interruption of
19	on-line data presentment and billing service to those
20	customers.
21	Finally, there were challenges specific to the
22	largest customers with demands over 1,500 kW. The
23	Company experienced several delays in the installation

1 of VAR-capable meters for these customers because many of their sites are multi-metered and the locations are 2 3 difficult to access or work in. Installing working 4 communications in these locations has been more challenging than anticipated and, in combination with 5 6 the weather and other setbacks described above, has 7 compounded the difficulties of meeting the projected dates in the initial Plan. 8 9 0. What is the current status of this project? 10 Currently, approximately 5,000 reactive power meters Α. 11 are installed, and all system modifications to the CSS 12 and MDMS have been completed. 13 Q. What has been the approximate bill impact to customers 14 who have been billed reactive power charges? From the time reactive power charges were first billed 15 16 through August 2012, the Company has collected only 17 \$1.8 million in reactive power charges. During this 18 same period, the total electric bill amount was \$500 million, so the reactive power charges were only 19 approximately 0.36% of the customers' total bill 20

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amount.

Please identify the percentage of customers with 1 Ο. 2 reactive power metering that have billable power 3 factors and the potential revenue per customer. 4 Approximately 80% of these customers have billable Α. 5 power factors during the warmer months and 65% in the 6 cooler months. The Company estimates that, upon 7 completion of metering installation for all customers subject to reactive power charges, approximately 72% 8 of reactive power customers will be billed for excess 9 10 kVArs on a monthly basis, with an average charge of 11 \$190 per customer per month. 12 Please describe the estimated total capital cost of Q. 13 the reactive power project. 14 The total estimated capital cost of the reactive power Α. 15 project is \$21.4 million. Approximately \$13.9 million has been spent to date in accordance with the 16 Commission's Reactive Power Order. These 17 18 expenditures, plus any additional capital expenditures for metering and communications and O&M expenses 19 incurred during the linking period, are being 20 21 deferred, net of revenue from the reactive power charges. The Electric Accounting Panel is testifying 22

to the disposition of the net deferral amount.

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- 1 Company estimates that an additional \$7.5 million
- 2 capital cost is required to complete the project, with
- 3 \$3.5 million to be spent in 2013 and \$4 million to be
- 4 spent in 2014.
- 5 Q. Please describe the increases in O&M costs associated
- 6 with the implementation of the Reactive Power program.
- 7 A. As a result of implementation of the Reactive Power
- 8 program, the Company experienced increases in O&M
- 9 costs related to: 1) interval-meter communications, 2)
- 10 billing and quality assurance support, and 3) outreach
- and education. As noted above, the O&M costs incurred
- to date have been deferred and those incurred during
- the linking period will be deferred in accordance with
- the Commission's Reactive Power Order. During the
- 15 rate year a total O&M increase of \$1.9 million will be
- incurred. Additional increases of \$200,000 and
- 17 \$100,000 will be incurred in the two subsequent 12-
- month periods ending December 31, 2015 and 2016.
- 19 Q. Please describe the increases in interval-meter
- 20 communications costs.
- 21 A. In the rate year, the Company will incur an O&M
- 22 expense of \$1.2 million in order to maintain
- communications with the population of interval meters

1		on a daily basis for online data presentment and
2		billing purposes. With continued installation of
3		reactive power metering equipment, the Company
4		projects increases of \$200,000 and \$100,000 in the two
5		subsequent 12-month periods ending December 31, 2015
6		and 2016.
7	Q.	Please describe the O&M costs associated with billing
8		and quality assurance support required for the
9		Reactive Power program.
LO	A.	Because of the implementation of the Reactive Power
L1		program, the number of interval meters needed per
L2		customer has significantly increased. To manage the
L3		increased interval meter population, two MDMS
L 4		Operators are required. They perform quality
L5		assurance activities in the MDMS, which receives Con
L6		Edison's electric interval metered data for billing
L7		and online presentment purposes. The two MDMS
L8		Operators are responsible for troubleshooting and
L9		diagnosing the series of validation checks that the
20		MDMS and associated systems perform with the intention
21		of maximizing automated billing. They validate the
22		accuracy of meter configurations in the system to
23		enable automated billing. In addition, the MDMS

1 Operators monitor and analyze reports that cite failure points and take corrective action to provide 2 3 for automated billing and the online availability of interval usage data on the Company's Customer Care 4 5 website. The two MDMS Operators are already in place performing these critical functions, and the costs 6 7 associated with the MDMS Operators have been deferred in accordance with the Reactive Power Order. 8 9 Operator was placed in position June 1, 2012 and the 10 other July 1, 2012. Additional Senior Customer Service 11 12 Representatives ("SCSRs") are needed to perform functions associated with the interpretation, 13 14 validation, editing and estimation of interval data associated with online data presentment and billing. 15 16 Interval-metered customer accounts present complexity 17 and challenges related to daily remote communications. 18 The Company's largest consumers of electricity are billed under the Reactive Power program. 19 accounts have diverse meter, account and system 20 21 configurations, and they are subject to numerous billing methodologies and hourly-calculated billing 22

components. These SCSRS are needed to perform daily

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- activities to provide timely and accurate bills and
- online data presentment. Four SCSRs are already in
- 3 place performing these functions, and the costs
- 4 associated with them have been deferred in accordance
- 5 with the Reactive Power Order. Two SCSRs will be
- 6 hired in the rate year. In the rate year the Company
- 7 will incur a cost of \$700,000 for these resources.
- 8 Q. Please describe the O&M costs associated with outreach
- 9 and education to reactive power customers.
- 10 A. An amount of \$11,000 is required in the rate year for
- outreach and education purposes. A quarterly
- 12 newsletter will be published to educate customers on
- billing rates, meter functionality, and web site
- resources. A bi-annual web-seminar will be conducted
- to work with our customers in optimizing their online
- data access.
- 17 Q. Have you prepared, or had prepared under your
- 18 supervision, exhibits that detail the Reactive Power
- 19 Metering implementation?
- 20 A. Yes. We have prepared three exhibits. These are
- 21 entitled "REACTIVE POWER METERING CAPITAL," Exhibit
- 22 (CO-7), "REACTIVE POWER METERING O&M," Exhibit (CO-

1		8), and "REACTIVE POWER METERING O&M WORKSHEET,"
2		Exhibit (CO - 9)
3		MARK FOR IDENTIFICATION AS EXHIBIT(CO-7),
4		EXHIBIT(CO-8), and EXHIBIT(CO-9)
5		(b) Conversion to Coincident Demand Billing
6	Q.	Have meter installations for the Reactive Power
7		Program presented the opportunity for any customer
8		billing structure modifications?
9	A.	Yes. Since the Reactive Power Program necessitates
L O		that each customer meter record and transmit interval
L1		data to the Company, the Company will now have the
L2		information to bill customers with multi-metered
L3		accounts on the basis of coincident, rather than
L 4		additive, demand. Moreover, customers eligible for
L5		coincident demand billing will no longer have to
L6		install and maintain impulse wiring in order to
L7		support coincident demand billing. Billing the
L8		customer on a coincident demand basis is typically
L9		beneficial for customers and more accurately
20		identifies the customer's demand on the system.
21	Q.	What is the difference between coincident and additive
22		demand?

- 1 A. Coincident demand is the highest integrated demand
- 2 registered on all the meters on the customer's account
- during the same 30-minute period. Customers who are
- 4 not eligible for coincident demand billing according
- 5 to the tariff or who do not install or maintain the
- 6 required impulse wiring are billed for the sum of the
- 7 peak demand on each meter, which is referred to as
- 8 additive demand.
- 9 Q. Why is coincident demand typically beneficial to a
- 10 customer?
- 11 A. Coincident demand is always equal to or less than
- 12 additive demand. If each meter point peaks at the
- same time, then they can be the same. If the meter
- points have staggered peaks, then the difference
- between coincident and additive demand can be
- 16 significant.
- 17 Q. What customer billing structure modification is
- 18 proposed?
- 19 A. The Company proposes that all customers with reactive
- 20 power metering that have been billed on the basis of
- 21 additive demand due to previous customer site
- 22 conditions be transferred to coincident demand
- 23 billing.

- 1 O. How many customers will this affect?
- 2 A. Approximately 150 customers would transition from
- additive demand billing to coincident demand billing.
- 4 The Rate Panel will describe the associated tariff
- 5 changes.
- 6 Q. How will this change be communicated to customers?
- 7 A. As noted below in the Outreach section of this
- 8 testimony, the affected customers will be notified of
- 9 the change in their demand billing structure.
- 10 Q. Are you proposing to eliminate any other limitation on
- the availability of coincident demand billing?
- 12 A. Yes, we are proposing to eliminate the requirement
- that each watthour meter have a rated capacity that is
- 14 no less than one percent of the rated capacity of any
- other watthour meter on a multi-metered account for
- that account to be eligible for billing on a
- 17 coincident demand basis.
- 18 Q. Please explain why this change is being proposed.
- 19 A. Modern technology has made that requirement obsolete.
- The requirement was first tariffed in 1949. The
- 21 Company's filing letter of December 30, 1948, explains
- 22 that this prohibition was added because of technical
- issues associated with the sensitivity of the demand

1 contactors in the meter. The technology of that era did not accommodate the installation of a pulse-2 3 initiating device on such a comparatively small meter 4 capable of producing an output value equal to the 5 output values produced by the other meters in the 6 group and, thus, record that meter's registration 7 along with the registrations of the other account meters. Current meter technology eliminates this 8 9 problem through use of either (a) individual interval 10 meters, for which the meter data is aggregated through 11 software, or (b) a modern totalizer, which is capable of aggregating meters with pulse outputs of different 12 13 The Rate Panel describes the associated values. 14 tariff changes.

### 4. METER DATA MANAGEMENT SYSTEM ("MDMS")

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16 Ο. Has the Company completed implementation of its MDMS? 17 Α. Yes. The Company completed implementation of the MDMS 18 in 2010 to provide billing support for MHP and reactive power customers with monthly demand in excess 19 of 500 kW. The system provides the functionality to 20 21 develop the billing determinants necessary for MHP and reactive power accounts and provides the web portal 22 where interval data, both real and reactive, is made 23

available to customers daily on a one-day lag, or more 1 frequently in the case of DR events. 2 3 During 2011 and 2012, functionality was added to 4 support the billing of traction accounts, DR and Standby Service applications, and also to provide an 5 6 interface with meters in the smart grid pilot in Long 7 Island City. Since the implementation of the MDMS in 2010, has it 8 Ο. 9 been necessary to upgrade the MDMS software platform? 10 Α. The MDMS application software is continually Yes. 11 modified by the product developer to provide for increased functionality and improved performance in 12 response to industry needs. Improvements in the MDMS 13 14 software platform are helping the Company keep pace with its growing population of MHP and reactive power-15 16 billed accounts and the increasing data requirements 17 associated with DR customers. Between 2011 and 2012, 18 the Company performed a full version upgrade of MDMS 19 software. 20 The MDMS solution employed by the Company has an 21 architecture that can use different database platforms. Version upgrades are available based on 22 the database platform selected. 23

- 1 Q. What was the total cost of the work performed since
- 2 MDMS implementation in 2010?
- 3 A. The cost for these improvements was \$2.3 million in
- 4 2011 and is forecasted to be \$300,000 in 2012 to
- 5 complete this work.
- 6 Q. Is any additional work planned?
- 7 A. Yes. The Company plans replacement of the MDMS
- 8 application software and hardware to address
- 9 obsolescence of the MDMS database server and provide
- 10 for an upgrade of MDMS software to the latest version.
- 11 The projected cost for this work in 2013 is \$3
- 12 million. In subsequent years, funding is also
- 13 required to alternately install and test hot fixes,
- service packs and patches so that all new
- 15 functionality is backwardly compatible with that
- 16 currently in place, and full version upgrades where
- 17 the entire software application is replaced in order
- 18 to continue receiving the most current functionality,
- enhancements and vendor support. In 2014 and 2016,
- the minor upgrades and testing are planned at a cost
- of \$325,000 in each year, and in 2015 and 2017
- 22 \$805,000 in each year is required for the full version
- 23 upgrade and compatibility testing.

- 1 Q. Have you prepared, or had prepared under your
- 2 supervision, an exhibit that details the MDMS
- 3 implementation?
- 4 A. Yes. We have prepared one exhibit. It is entitled
- 5 "METER DATA MANAGEMENT SYSTEM," Exhibit\_\_\_(CO-10).
- 6 MARK FOR IDENTIFICATION AS EXHIBIT\_\_\_(CO-10)

## 7 5. CALL CENTER IMPROVEMENTS

- 8 Q. Please describe the improvements that the Company is
- 9 planning to make at the Call Center.
- 10 A. The Company is in the process of replacing the Call
- 11 Center's automated call distribution ("ACD") system
- 12 and its quality assurance call recording system. In
- Cases 09-E-0428 and 09-G-0795, the Commission adopted
- Joint Proposals that reflect capital spending on this
- 15 project under the Company's current electric and gas
- 16 rate plans.
- 17 Q. When will this work be completed?
- 18 A. This project will be completed by the end of 2013.
- 19 Q. What is the capital cost of this program?
- 20 A. The Company plans to spend \$3.4 million on capital
- 21 costs associated with the completion of Call Center
- 22 Improvements in 2013.

- 1 Q. Will additional O&M costs be experienced related to
- 2 this project?
- 3 A. Yes. Starting in the 12-month period ending December
- 4 30, 2015, the vendor's maintenance charge for the ACD
- 5 will increase by \$169,000.
- 6 Q. Have you prepared, or had prepared under your
- 7 supervision, exhibits that detail the Call Center
- 8 Improvements?
- 9 A. Yes. We have prepared one exhibit. It is entitled
- "CALL CENTER IMPROVEMENTS," Exhibit\_\_\_(CO-11).
- 11 MARK FOR IDENTIFICATION AS EXHIBIT\_\_\_(CO-11)
- 12 6. CUSTOMER SERVICE SYSTEM IMPROVEMENTS
- 13 Q. Please describe the changes the Company is planning to
- make to its CSS.
- 15 A. The CSS that serves the great majority of our
- 16 customers is over 40 years old and cannot be readily
- 17 modified to support new business needs. The CSS is
- 18 composed of a suite of systems that provide for the
- 19 support of the customer service and billing functions.
- Over the years, new applications and enhancements to
- 21 the existing systems have introduced new technologies,
- 22 enhanced functionality and improved integration
- 23 between the systems that comprise the CSS suite. Due

1 to these efforts, the CSS has remained viable and technically supportable. The Company plans to 2 3 continue these efforts. 4 In addition, with the increasing complexity of programs the CSS must support, the Company needs to 5 6 continue to explore the viability of the Company's CSS 7 and the steps that must be taken for its reliable operation into the future. In this effort, the 8 Company plans to continue the CSS risk assessment work 9 10 already underway and implement specific risk 11 mitigation strategies for continued viability of the 12 CSS. What is the projected cost for this work? 13 Q. 14 The Company plans to continue upgrading of programming Α. 15 languages used in the CSS and interfacing systems as 16 well as implementing functional enhancements and risk 17 mitigation strategies. The Company plans to spend 18 approximately \$5 million each year starting in 2013 and continuing through 2017 on this work. In Cases 19 20 09-E-0428 and 09-G-0795, the Commission adopted Joint 21 Proposals that reflect capital spending on these projects under the Company's current electric and gas 22 rate plans. 23

- 1 Q. Please explain the Company's efforts related to
- 2 upgrading of programming languages.
- 3 A. We continue to upgrade the programming languages in
- 4 which the CSS suite of systems was originally
- 5 developed. We have been systematically reprogramming
- 6 the multiple systems to a more universally used and
- supported language. We plan to upgrade programming
- 8 languages for mainframe programs including activity
- 9 file maintenance, master database, user interface, and
- 10 file maintenance batch processing. In addition,
- 11 upgrades to programming language are needed for a
- 12 number of critical interfacing systems, such as the
- 13 CSS Desktop User Interface, the Consolidated Utility
- Billing System ("CUBS"), and the Customer Service
- 15 Online website.
- 16 Q. Why is this work required?
- 17 A. With respect to upgrades needed to the mainframe CSS,
- 18 the availability of programmers and technicians
- trained in the older COBOL, ASSEMBLER and RAMIS
- 20 programming languages in which these programs were
- 21 originally developed continues to diminish. Without
- an upgrade to more current programming languages, this
- critical group of systems will be increasingly

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difficult to support and maintain, resulting in the Company's inability to create new applications or fix problems as they occur. In addition, future releases of the operating system under which these systems execute orders may not support these older programming languages. Therefore, upgrading to a more universally used and supported language is critical to the continued viability of CSS and the Company's ability to bill and serve its customers. In addition, a more current and supported programming language is needed to more efficiently facilitate CSS integration with other systems. These changes are especially important as the nature of customer needs and billing are becoming more complex. CSS must be able to interact effectively with systems that enable such options as energy choice and MHP, and facilitate quality data presentation to CSRs. With respect to the non-mainframe systems, such

With respect to the non-mainframe systems, such as the CSS Desktop Interface, Customer Service Online website, and CUBS, these systems were written in programming languages that are being phased out, and future releases of the operating system under which

- 1 these systems execute orders may not support these
- 2 older programming languages.
- 3 Q. Please explain the Company's efforts related to the
- 4 development of functional enhancements to the suite of
- 5 systems that comprise CSS.
- 6 A. We plan functional enhancements that will expand the
- 7 self-service options available to customers on the
- 8 Company's website to provide customers with an easy
- and convenient way to do business with the Company.
- 10 Functional enhancements will also be implemented to
- improve business processes and address customer care
- issues.
- 13 Functional enhancements are also required to
- provide additional tools for management of field
- 15 forces in the ServiceLink and Cycle Data Warehouse
- 16 systems. These important functional enhancements are
- 17 required so that the functionality and benefits of
- 18 these systems can continue to be expanded to meet the
- challenges of field work in the areas of meter reading
- 20 and credit and collections. It is critical that the
- 21 Company continues to invest in these systems, so that
- the information is available to manage the field
- workforce.

- Q. Please explain the Company's efforts related to
   implementation of risk mitigation strategies.
- 3 A. The Company plans to continue its efforts to review
- 4 the operation and capabilities of the CSS suite and
- determine if potential bottlenecks to future system
- 6 expansion exist and pose a threat to the continued
- 7 viability of the customer service and billing
- 8 functions. A team of employees from Customer
- 9 Operations and Information Resources, along with
- 10 contractors, have completed a process to assess the
- 11 top CSS risks. The team has identified risks in the
- 12 areas of system functionality, technical obsolescence,
- technical human resources and knowledge, and
- governance, and has developed a preliminary plan to
- 15 address these risks. Mitigation strategies may
- 16 include the development of alternative staffing and
- 17 maintenance models, development of a knowledge
- 18 transfer plan, enhancements to the CSS to provide
- 19 additional functionality outside the original design,
- technical optimization and re-engineering, and
- 21 development of a program governance structure.
- 22 Q. Why is this work necessary?

1	Α.	While the Company continually monitors the market for
2		utility-oriented customer service systems, and
3		actually implements leading market solutions on a
4		small scale, we do not believe that implementing a new
5		CSS for our electric and gas customers is cost-
6		justified at this time. Our experience with vendor
7		software in this area, and the monitoring of
8		replacement projects at other utilities, supports our
9		current conclusion that extending the life of our
10		existing system is the more effective alternative.
11		The Company has successfully implemented major
12		enhancements to its current system, including a new
13		billing sub-system, sophisticated user interfaces and
14		account analysis for customer representatives,
15		wireless interfaces for real-time field information,
16		support and billing for the largest population of
17		retail access customers in the State, and robust
18		customer self-service features through our Internet
19		and Interactive Voice Response ("IVR") applications.
20		We believe that we can continue to enhance our present
21		system through identification and modernization of
22		targeted areas of the system, including large-scale
23		enhancements as necessary. Proceeding with the

1		mitigation of identified risks is critical to
2		maintaining continued viability of the system,
3		including production of accurate billing, application
4		of credit and collection procedures, and customer
5		service functions. In addition, investing in the
6		current CSS suite of systems and mitigating known
7		risks to continue viability is cost effective when
8		compared to a larger scale replacement of the systems
9		which would have significant risks and costs.
L O	Q.	What is the projected capital cost of this program?
L1	Α.	The projected capital cost of this program is \$5
L2		million per year during 2013-2017.
L3	Q.	Have you prepared, or had prepared under your
L4		supervision, an exhibit that details the Company's
L5		proposed investment in the CSS?
L6	Α.	Yes. We have prepared two exhibits. These are
L7		entitled "CUSTOMER SERVICE SYSTEM IMPROVEMENTS,"
L8		Exhibit(CO-12), and "CUSTOMER SERVICE SYSTEM
L9		IMPROVEMENTS WORKSHEET," Exhibit(CO-13).
20		MARK FOR IDENTIFICATION AS EXHIBIT(CO-12) AND
21		EXHIBIT (CO-13)
22		7. OFF-SYSTEM BILLING

- 1 Q. Please describe the Company's efforts related to
- 2 customer billing performed outside of the CSS.
- 3 A. The Company utilizes a number of billing processes
- 4 outside of the CSS (termed "off-system" billing
- 5 processes) to bill customers taking service under
- 6 certain rates and programs. Managing and billing
- 7 these customer accounts involves manual processes
- 8 and/or systems other than CSS. The Company is in the
- 9 process of migrating off-system billing applications
- 10 to a common automated customer care and billing
- 11 application that will support these billing activities
- and provide automation of these processes, eliminating
- the manual processes for billing currently in use and
- resulting in improved controls of this complex
- 15 billing. In Cases 09-E-0428 and 09-G-0795, the
- 16 Commission adopted Joint Proposals that reflect
- 17 capital spending on these projects under the Company's
- 18 current electric and gas rate plans.
- 19 Q. Why is it important that these off-system billing
- 20 processes be migrated to a common automated
- 21 application?
- 22 A. Some of our largest customers and those billed under
- our most complex rates are currently billed using our

off-system billing processes. Managing and billing these customer accounts involve manual processes and/or stand-alone satellite systems. The conversion of these billing applications to a common platform will provide automation of these processes that will eliminate manual processes and provide a more robust and reliable platform for the billing of these accounts. The common system will also enable the automation of quality control mechanisms and improved database management and maintenance for the involved accounts.

The new customer care and billing application will also provide functionality for automated bill generation and a common bill format, which will resemble Con Edison's bill format and design for all other Con Edison customers' bills, and eliminate the various styles/formats of billing statements currently in use for off-system billing.

In addition, the new customer care and billing application provides a flexible and reliable platform that can be used to address future regulatory mandates for modified and/or new rates and programs that would

- otherwise need to be supported by manual applications or new stand-alone systems.
- Q. Please describe other benefits to migrating the offsystem billing processes to one common platform.
- 5 Α. The preparation of bills using off-system billing 6 applications involves complex manual processes, and 7 employees must receive specialized training to bill The migration of off-system billing 8 these accounts. 9 processes to one common platform will provide for a 10 more accessible billing application that is utilized 11 by a larger pool of employees and reduces the need for specialized knowledge to enable the billing of these 12 In addition, as discussed below, the 13 accounts. 14 elimination of manual processes results in human 15 resources savings.

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Based upon current customer participation in these special rates/programs, the off-system billing project will eliminate the manual work of about 5.5 SCSR FTEs from 2013 through 2015. In addition, this project will enable the Company to offset incremental costs, which would be incurred without the elimination of manual processes, associated with the growth of

1 customer participation in specialized rates/programs, such as electric standby service and net metering. 2 3 Moreover, the savings from this off-system 4 billing automation would help mitigate operating costs 5 related to any future regulatory mandates for new 6 rates that would otherwise increase our operating 7 expenses. What off-system billing applications currently in use 8 Ο. will be replaced, and what other types of billing will 9 10 be automated? 11 The Company plans to utilize the common automated Α. 12 platform to replace off-system billing applications 13 currently in use for electric standby service, excess 14 distribution facilities, net metering, and economic 15 development programs, including the Recharge New York 16 Program. The original scope of this effort has been 17 expanded to support other manually-supported rate 18 configurations and new, complex rates such as the recently-approved Offset Tariff option under Standby 19 20 Service. 21 Furthermore, it is reasonable to anticipate that there will be new rates/programs that will need to be 22 migrated to the automated platform due to new 23

- legislation, regulatory requirements, and customers'
- 2 changing needs and interests.
- 3 Q. What is the status of this project?
- 4 A. The Company is implementing this project in stages.
- 5 Automation of electric Standby Service rates was
- 6 completed in 2nd quarter 2012. The implementation of
- 7 electric Standby billing in April 2012 required the
- 8 development of over thirty-five interface platforms
- 9 due to Standby Service billing complexity. Forums
- were held with key electric standby customers and
- 11 consultants to get customer input on bill design,
- specifically the change from a multiple page bill to a
- two-page bill format. The new bill design
- consolidates customer billing information in a more
- 15 comprehensive and clear billing format/design
- 16 consistent with Con Edison's universal customer bill
- 17 design. Customer feedback from the forums was
- 18 positive, and standby customers/consultants that
- 19 received the new bill find it informative, clear and
- 20 concise.
- 21 Q. What other work was completed in 2012?
- 22 A. For electric customers, the implementation of billing
- for Excess Distribution Facilities was completed in

- October 2012. Work on gas penalty billing was
- 2 completed in 2012 as well.
- 3 Q. Please describe what other work is planned.
- 4 A. In 2013, billing for Recharge New York and Distributed
- Gas Generation (Rider H of the Company's gas rate
- 6 schedule) is scheduled for implementation, followed by
- 7 net metering in 2014, and unique rate configurations
- 8 and new rates/programs in the 2015 2017 period.
- 9 Q. Please explain the work involved in replacing the off-
- 10 system billing applications.
- 11 A. A number of activities are involved in the development
- of each automated customer care and billing
- 13 application. These include: data migration and
- 14 customer information conversions, customized
- application and interface development, complex
- 16 algorithm and framework configuration and bill
- 17 design/development; and associated customer forums to
- 18 obtain feedback and suggestions on bill design. In
- 19 addition, testing is conducted for all billing
- 20 calculations and bill content, followed by additional
- 21 communication to the customer.
- 22 Q. What is the projected capital cost of this program?

The projected cost for the continued development and 1 Α. 2 implementation of off-system billing processes is 3 estimated to be a total of \$6.4 million for the period 4 2013 through 2017. The Company plans to expend \$1.65 million in capital in 2013, \$1.76 million in 2014 and 5 6 \$1.0 million in each of the next three years. 7 What is the projected O&M savings for the 5.5 SCSR Ο. FTEs that will be saved from this program? 8 9 Α. A savings of \$338,000 will be achieved in the rate 10 year. An additional savings of \$47,000 will be 11 achieved in the subsequent 12-month period ending December 31, 2015. 12 13 Have you prepared, or had prepared under your Q. 14 supervision, exhibits that detail the Company's 15 proposed investment in off-system billing? 16 Α. Yes. We have prepared an exhibit entitled "OFF-SYSTEM BILLING," Exhibit\_\_\_\_ (CO-14), and an exhibit entitled 17 18 "OFF-SYSTEM BILLING WORKSHEET," Exhibit\_\_\_\_ (CO-15). MARK FOR IDENTIFICATION AS EXHIBIT\_\_\_(CO-14) and 19 20 EXHIBIT\_\_\_(CO-15) 21 8. COMPETITIVE MARKET CUSTOMER SERVICE SYSTEMS Please describe the current state of the competitive 22 Q. retail market in Con Edison's territory. 23

The Company continues to support the ability of our 1 Α. 2 customers to choose their commodity supplier. 3 competitive retail market in Con Edison's territory is 4 continuing to experience substantial growth in the 5 number of customer enrollments. As of December 2012, 6 over 900,000 customers are taking supply service from 7 ESCOs, representing an annual increase of about 100,000 customers over approximately the last two 8 9 years. With our customers clearly responding to the 10 energy choices offered by ESCOs, we forecast that 11 enrollments will continue through the 2013-2017 12 period, with over 1,200,000 customers taking supply service from ESCOs by 2017. 13 14 Please describe your proposal relating to systems that Q. 15 support customer choice of energy supplier. 16 Α. The Company plans changes to support customer care 17 functions provided to the large number of customers 18 participating in the competitive marketplace. over 900,000 customers taking supply service from 19 ESCOs, improvements are needed to these systems to 20 21 better facilitate enrollment and billing-related 22 transactions.

1		The establishment and billing of accounts taking
2		supply service from an ESCO is a complex process that
3		involves the interaction of a number of Company
4		systems. Our proposal provides for a consolidated
5		system that will support both electric and gas
6		processes from a single data source. The consolidated
7		system and related improvements to transaction
8		processing and database management will assure
9		sustainability and better facilitate the customer care
10		functions performed by the Company for customers
11		taking supply service from ESCOs.
12	Q.	Please describe these changes.
13	Α.	The changes that we propose involve the development of
14		a consolidated system for electric and gas. These
15		changes will provide for a combined database of
16		electric and gas customer data to provide consistent
17		customer information utilized in electric and gas
18		transactions and provided to users, consolidated
19		processing of electric and gas transactions, and
20		improved interactions with connected systems such as
21		the CUBS, which supports the billing of ESCO charges.
22		Overall, improvements will provide for the Company's
23		continuing reliable support of the nearly 900,000

1 participating customers and customers who initiate ESCO service hereafter. 2 3 What is the projected cost of the consolidated system Q. 4 and associated changes? 5 The projected cost for this work is \$5.1 million. Α. 6 Anticipated funding requirements for this program are: 7 2014 - \$1.3 million, 2015 - \$1.3 million, 2016 - \$1.3 million and 2017 - \$1.2 million. 8 9 Q. Have you prepared, or had prepared under your 10 supervision, exhibits that detail the Company's 11 proposed investment in the competitive market customer service systems? 12 13 Α. Yes. We have prepared two exhibits. These are 14 entitled "COMPETITIVE MARKET CUSTOMER SERVICE SYSTEMS," 15 Exhibit \_\_\_\_(CO-16), and an exhibit entitled "COMPETITIVE MARKET CUSTOMER SERVICE SYSTEMS 16 WORKSHEET, " Exhibit \_\_\_\_(CO-17). 17 18 MARK FOR IDENTIFICATION AS EXHIBIT \_\_\_\_ (CO-16) and EXHIBIT \_\_\_\_(CO-17) 19 20 9. ON BILL RECOVERY PROGRAM 21 Ο. Please describe the on-bill recovery program. The Company is providing billing and collections 22 services in support of NYSERDA's loan program for 23

- 1 customers' energy efficiency investments pursuant to 2 the Power NY Act of 2011. Because the loan
- 3 installments are billed and collected through utility
- bills, the utility billing is described as an "on-bill
- 5 recovery" ("OBR") mechanism.
- 6 Q. What work is planned to support this activity?
- 7 A. To implement the billing and collection of loan
- 8 installments on customer bills, the Company must
- 9 develop and implement system modifications to the CSS
- and new business processes. System processes must be
- developed to exchange data with the loan financing
- 12 party, record loan information on customer accounts,
- generate loan installments on a monthly basis, present
- loan installments on customer bills, allocate payments
- between utility charges and loan installments,
- 16 integrate loan installments in credit and collection
- 17 processes, including the specialized processing for
- 18 public assistance and bankruptcy customers, and
- disburse funds to the loan financing party.
- 20 O. What is the projected cost for this work?
- 21 A. Since 2011, the Company has spent \$1.3 million to

1 implement OBR. The Company plans to spend an additional \$0.5 million during 2013 to complete system 2 3 work. Has the Company incurred any additional costs related 4 Ο. 5 to this program? 6 The Company has incurred the expense of one Α. Yes. 7 full-time employee to administer this program at a cost of \$100,000. 8 Have you prepared, or had prepared under your 9 10 supervision, exhibits that detail the Company's 11 proposed investment in the OBR program? 12 Yes. We have prepared two exhibits. These are entitled Α. 13 "ON BILL RECOVERY PROGRAM," Exhibit \_\_\_\_(CO-18), and an 14 exhibit entitled "ON BILL RECOVERY PROGRAM WORKSHEET," 15 Exhibit \_\_\_\_(CO-19). 16 MARK FOR IDENTIFICATION AS EXHIBIT \_\_\_\_(CO-18) and EXHIBIT \_\_\_\_(CO-19) 17 18 10. ELECTRONIC PAYMENT PROCESSING Please explain how the Company currently handles 19 Q. 20 electronic-payment processing. 21 The Company encourages its customers to make their Α. 22 bill payments using one of two different electronic-23 payment systems, Internet and telephone.

processing of electronic payments involves the 1 conversion of the electronic payment into an Automated 2 3 Clearing House ("ACH") format and transmittal of the 4 payment to a depository financial institution. 5 Company uses a proprietary software application that 6 resides on the Con Edison server to perform these 7 functions. The software was developed over ten years 8 ago, and the Company has an arrangement with the vendor to use the software for an annual database 9 10 maintenance cost of about \$25,000. 11 Please explain changes that will impact the Company's Ο. 12 handling of electronic payments. 13 The vendor has informed the Company that it will no Α. 14 longer support the software application currently in 15 use, and it is not offering a similar product for 16 Company use. Instead, the vendor is offering to 17 process the Company's customer payments for a "per-18 transaction" fee of \$0.06. What is the projected impact of the "per-transaction" 19 Q. 20 fee of \$0.06? 21 The Company receives nearly 12 million electronic Α. 22 payments annually and would incur an annual O&M cost

- of approximately \$720,000 for the processing of the
- 2 electronic payments received.
- 3 Q. Please describe the Company's plan to address the
- 4 increased processing costs of electronic payments.
- 5 A. The Company has decided to develop its own software
- 6 solution by 2013.
- 7 O. Please describe the work that is involved in
- 8 development of this application.
- 9 A. Work involves the replication of current process flows
- 10 and functional requirements and the purchase of a
- 11 dedicated server for this function and associated
- software. We are projecting \$1.4 million in costs for
- this project, including in-house labor, consultants
- 14 and equipment. The project will take nearly two years
- to develop and implement, with anticipated funding
- requirements of \$1 million in 2013 and \$0.4 million in
- 17 2014.
- 18 Q. Why is the Company developing an in-house system?
- 19 A. The Company is developing an in-house system for
- 20 processing electronic payments to avoid the on-going
- 21 O&M costs associated with using an outside vendor's
- 22 services.

Does the Company anticipate that it will incur per-1 Ο. 2 transaction fees before the Company's in-house 3 application is operational? 4 Α. Yes. 5 Have you prepared, or had prepared under your Q. 6 supervision, an exhibit that details the Company's 7 proposed investment in electronic payment processing? Yes. We have prepared one exhibit. This exhibit is 8 9 entitled "ELECTRONIC PAYMENT PROCESSING, " Exhibit 10  $\_\_(CO-20)$ . MARK FOR IDENTIFICATION AS EXHIBIT (CO-20) 11 12 CUSTOMER SERVICE PERFORMANCE MECHANISM 13 Q. Do you have any proposals with respect to the Customer 14 Service Performance Mechanism ("CSPM")? 15 The current rate plan provides for the CSPM to 16 continue unless and until changed by the Commission. 17 For purposes of this proceeding, the Company is not

21 the Company is not proposing to modify the terms of

18

19

20

proposing to eliminate a customer service performance

service performance mechanism during the rate year,

mechanism. Assuming continuation of a customer

- 1 Q. Has the Company incurred any revenue adjustments under
- the current CSPM?
- 3 A. No. The Company has not incurred any revenue
- 4 adjustments in the last three rate years.

### 5 LOW INCOME PROGRAM

- 6 Q. What is the purpose of the Company's low income
- 7 testimony?
- 8 A. The Company will describe its Low Income Program and
- 9 discuss the continuation of the program in the rate
- 10 year.
- 11 Q. Please describe the Company's Low Income Program.
- 12 A. The Company has a Low Income Program for residential
- 13 electric customers. Customers qualifying for the Low-
- 14 Income Program ("Qualifying Customers") must be
- receiving assistance for the payment of utility bills
- 16 under Direct Vendor or Utility Guarantee programs,
- 17 receiving benefits under Supplemental Security Income,
- 18 Temporary Assistance to Needy Persons/Families, Safety
- 19 Net Assistance, Supplemental Nutrition Assistance
- 20 Program", or have received a Home Energy Assistance
- 21 Program ("HEAP") grant in the preceding twelve (12)
- 22 months ("Qualifying Programs"). Currently, customers
- in the program receive a discount of \$8.50 on the

customer charge and a one-time waiver of a portion of 1 the reconnection fee if their service is terminated 2 3 for non-payment. 4 Is the Company proposing to continue the low income Ο. 5 program adopted by the Commission in Case 09-E-0428? 6 According to section K of the Joint Proposal, Α. 7 the customer charge discount component of this program will continue unless and until changed by the 8 9 Commission. The Company also proposes to continue the 10 elements of the program described in sections K.1. 11 through K.5. of the Joint Proposal relating to customer enrollment, low-income customer charge 12 discount, reconnection fee waiver, cost recovery, and 13 14 reporting requirements. As for the reconnection fee waiver, the Company proposes to restore the 15 16 reconnection fee waiver to 100 percent of the service 17 reconnection fee effective January 1, 2014, subject to 18 adjustment thereafter in accordance with the terms of the program. During the course of the electric rate 19 plan that commenced on April 1, 2010, the waiver had 20 21 been reduced from the 100 percent level (in accordance with the terms of the program) when the Company 22 estimated that the cost target for reconnection fee 23

- 1 waivers would exceed the target cost over the course
- of the three-year rate plan.
- 3 Q. How does the Company propose to administer the
- 4 reconnection waiver component of the program?
- 5 A. The reconnection waiver component of the program has
- 6 offered low-income customers a one-time waiver of the
- 7 reconnection charge during the electric rate plan. In
- 8 fairness to other customers who may need to take
- 9 advantage of this program during the rate year, the
- 10 Company is extending the waiver component only to
- 11 customers who have not benefited from the waiver
- during the rate plan period that commenced April 1,
- 2010, although, on a case-by-case basis and for good
- 14 cause shown and provided the cost of the waiver
- program does not exceed the target cost amount, the
- 16 Company will grant additional waivers.
- 17 Q. The program target costs of \$114.75 million for the
- 18 customer charge discount and \$1.5 million for the
- 19 service reconnection fee waiver were set in the Joint
- 20 Proposal for the three-year rate plan term. What
- 21 target costs are proposed for the rate year beginning
- 22 January 1, 2014?

For the rate year beginning January 1, 2014, the 1 Α. 2 Company is proposing targets of one-third of the 3 three-year target, which equals \$38.25 million for the 4 customer charge discount component and \$0.5 million for the reconnection fee waiver component. 5 6 The Joint Proposal anticipated that 375,000 customers Q. 7 would participate in this program. Has there been a forecast of any change in the number of participating 8 9 customers? 10 In the historic period ending June 30, 2012, the Α. No. 11 Company experienced increases and decreases in the 12 population of participating customers from 310,000 to 13 373,000 to 382,000 to 372,000 on the date of the end 14 of each of the rate year quarters. The most recent 15 reconciliation of the Company's records with those of 16 the governmental agencies (the New York City Human 17 Resources Administration and the County of Westchester 18 Department of Social Services, otherwise, the "Agencies") administering the Qualifying Programs was 19 20 conducted in April 2012. That the population has 21 remained in a band around the target population of 375,000 for nine months indicates that the forecast 22

number of participants is reasonable.

23

The Joint Proposal provides for a reconciliation of 1 Ο. 2 the Agencies' records with the Company's records once 3 a year in order to have all Qualifying Customers enrolled and all customers who are no longer receiving 4 5 benefits under a Qualifying Program de-enrolled. 6 the Company experienced any issues with the Agencies 7 with respect to the reconciliation process? The Agencies' process is to offer the recipients 8 Α. 9 identified in the reconciliation process the 10 opportunity to "opt out" of the Agencies' sharing of 11 their identities with the Company for enrollment purposes. The Agencies have done so in a letter to 12 each recipient, the cost of which they believe should 13 14 be funded by the Low Income Program, rather than by 15 governmental budgets. 16 Ο. What is the Company's position on this issue? 17 Α. As indicated above, the Company is proposing to 18 continue the current Low Income Program unchanged, which means that the Low Income program would not fund 19 these mailing costs. However, if, as anticipated, the 20 21 Agencies propose that the Low Income Program provide funding for these mailings, the Company intends to 22 remain neutral as to this issue. We do note that if 23

1		the Commission decides that the Company should fund
2		this expense, the revenue requirement would need to be
3		increased to reflect the projected mailing costs.
4		OUTREACH
5	Q.	Please explain the purpose of the Company's outreach
6		efforts.
7	A.	The Company's outreach efforts are intended to provide
8		education to customers about their rights and
9		responsibilities as utility customers, to inform them
10		about the many programs and services that the Company
11		offers, to help them manage their energy bills, to
12		provide information about the ways that they can
13		contact Con Edison and about the many options that
14		they have to pay their bills. The Company's Outreach
15		group also provides a presence in the community,
16		participating in community events and hosting two
17		conferences annually for community-based
18		organizations, and providing presentations to
19		community groups. The Company provides assistance in
20		the community during many kinds of service-related
21		emergencies by staffing on-site customer information
22		centers. The Company also provides material to

customers about energy matters and public safety. In

23

1 addition, the Company provides material to schoolchildren in its service territory via our Con 2 3 Edison Kids web site and our partnership with 4 Scholastic Publishing, through which we produce energy 5 and safety booklets that are distributed to 34,000 6 elementary and middle school classrooms and 600 7 libraries annually. How much do you plan to spend for outreach and 8 9 education in the rate year? 10 Α. The Company spent \$2.99 million in the historic year 11 and plans to spend \$2.99 million on outreach and education activities in the rate year and in each of 12 the two subsequent 12-month periods ending December 13 14 31, 2015 and 2016. 15 Please describe the methods by which the Company's Ο. 16 current outreach and education efforts reach 17 customers. The Company's current outreach and education efforts 18 include the use of a wide range of vehicles to deliver 19 key messages. These include bill inserts, direct 20 mailings, email and the Internet, as well as mass 21 22 media outlets such as newspapers and radio.

1		layered approach is designed to reach the widest
2		possible audience.
3		In addition, the Company continuously explores
4		new channels through which to communicate its core
5		messages. These include employing email campaigns
6		that deliver targeted messaging; providing an
7		increasingly robust mobile web platform and developing
8		Smartphone applications that allow customers to get
9		information and do business with us while "on the go;"
10		exploring ways to extend the reach of the Company's
11		messaging via social media outlets; and refining the
12		way that information is presented to customers on the
13		conEd.com website.
14	Q.	Please describe what efforts the Company makes for
15		seniors, at-risk customers, and others in its customer
16		outreach activities?
17	A.	We provide special-needs customers with information
18		tailored to their needs. For example, the Company's
19		CONCERN program is designed to assist elderly and
20		disabled customers and provide information
21		particularly relevant to them. It includes a special
22		large-type newsletter called Spotlight distributed
23		twice annually, at the beginning of the winter and

1 The newsletter informs these summer seasons. customers about Con Edison programs such as payment 2 3 options, energy conservation and efficiency, programs 4 offered by public and private agencies, and tips to 5 help readers improve their health and quality of life. 6 It also provides seasonally relevant information for 7 summer and winter. The Company publicizes its CONCERN program on its website, at presentations and events, 8 9 and in its printed literature. 10 What are the key issues on which the Company plans to Q. focus its educational efforts? 11 12 Energy efficiency and conservation is an area of Α. 13 particular importance and will be a frequent subject 14 of outreach efforts. This includes making customers aware of the Company's rebate and incentive programs, 15 16 which promote energy efficiency and conservation. 17 Customer service issues, such as understanding the 18 customer bill, electronic billing and payment, power problems and associated restoration issues, public 19 safety, and the special needs of people using life 20 sustaining equipment ("LSE") will also be priorities 21 in the Company's efforts. Environmental issues, such 22 as the availability of electric vehicles ("EVs"), have 23

- 1 made national headlines lately as well and will be
- addressed as part of the Company's outreach and
- 3 education efforts.
- 4 Q. Does the Company propose changes that would affect
- 5 customers served under Rate I of Service
- 6 Classification No. ("SC") 9?
- 7 A. Yes. These changes include a phase-out of Special
- 8 Provision D and a 25 percent increase in the maximum
- 9 rate.
- 10 Q. If these changes are approved, what type of outreach
- is planned to educate affected SC 9 customers?
- 12 A. The Company plans to send letters to these customers,
- similar to the approach taken with the SC 7 phase-out.
- 14 SC 7 customers have been sent letters at the beginning
- of each rate year since the phase-out began in 2010.
- 16 The letters explain the rationale for eliminating the
- 17 SC 7 rate and detail the impact that the new rate will
- have on the bills of affected customers.
- 19 Q. In addition to the changes proposed to the SC 9 rate,
- 20 the Company has filed a proposal to modify its
- voluntary time-of-use ("VTOU") rate for residential
- and religious customers. What are the Company's
- outreach plans in regard to this new rate?

Α. The Company plans to use multiple mediums to educate residential and religious customers about the new VTOU rate. These include publishing information on the conEd.com website and in our Customer News bill insert. The Company also plans to update its VTOU brochure, "Time-Of-Use-Rates - How Off-Peak Hours Can Lower Your Costs," and to educate its employees to serve as advisors to customers who are interested in the rate.

Because the new VTOU rate may be of particular interest to owners of EVs, the Company plans to target these customers with information related to the VTOU rate and the option to take service for the EV charger through a separately-metered account under SC 2. The target audience will include customers who have self-identified as EV owners, as well as those who have notified the Company's Energy Services Department of their intent to install EV chargers at their premises. We will also reach out to organizations such as the Greater New York Automobile Dealers Association and to individual dealers in the Con Edison service territory in an attempt to obtain their assistance with educating new EV buyers about VTOU rates.

1		Finally, the Company plans to develop an online
2		time-of-use calculator, which will assist customers in
3		deciding whether or not the new VTOU rate will benefit
4		them. The calculator will replace the existing time-
5		of-use quiz on our conEd.com/tou webpage.
6	Q.	Is the Company planning to expand its use of
7		technology to extend its outreach and education
8		efforts?
9	Α.	Yes. A wide variety of technologies is available
10		today that can make doing business with the Company
11		easier, enables the Company to offer more proactive
12		communications to its customers, and gives customers
13		greater control over their energy use and the
14		associated costs. For this reason, the Company plans
15		to enhance its outreach and education initiatives
16		based on technologies that it has already deployed,
17		including its online bill calculators, the mobile
18		version of its conEd.com website and the Company's
19		interactive outage map. We also plan to continue
20		exploring and investing in new technologies, such as
21		mobile applications and text messaging for alerts,
22		which have the potential to improve the overall
23		customer experience.

- 1 Q. What outreach vehicles does the Company intend to
- 2 continue using?
- 3 A. The Company plans to continue distributing Customer
- 4 News, a bill insert in newsletter format that provides
- 5 seasonal and timely articles of interest on a
- 6 bimonthly basis. The Company will continue to
- 7 distribute Spotlight. The Company will also continue
- 8 publishing brochures, pamphlets and booklets on a wide
- 9 range of subjects and in multiple languages.
- 10 Q. Have customers expressed a preference about how they
- 11 like to get their information?
- 12 A. Yes. The Company conducted a survey in August 2012
- that explored customers' preferred methods of
- receiving information from the Company on energy-
- 15 related issues. The Company's market research firm
- 16 conducted telephone interviews with a random sampling
- of 505 Con Edison customers. The survey results
- 18 reflect a significant shift in customer preference as
- 19 compared to the results of a similar survey conducted
- 20 five years ago. The survey indicated that for many
- 21 customers, email, the Internet and social media are
- the favored forms of communications over bill inserts.
- 23 Because the percentage of customers who prefer to

1 receive communications electronically is likely to continue increasing over the next several years, and 2 3 because email, the Internet and social media offer 4 cost savings as compared to traditional mailings and 5 bill inserts, the Company plans to seek out and take 6 advantage of every opportunity to transition to these 7 methods of delivering information. That said, the Company plans to continue using, to some degree, all 8 of the communications vehicles mentioned above. 9 10 Please elaborate on these plans. Q. 11 As a result of the Company's increased efforts to Α. solicit customers' email addresses, we now have 12 roughly 1.1 million email addresses on file. We have 13 14 utilized these email addresses to send blast emails to customers to communicate safety and preparedness 15 16 information prior to forecasted storms and heat 17 events. And we have begun working with a vendor to 18 distribute emails to our customers containing energy efficiency and customer service-related information. 19 20 Does the Company plan to utilize email for any other Ο. 21 communications? This year, for the first time, the Company plans 22 to transition part of its annual LSE mailings to an 23

electronic format. The Company seeks to identify the residence of all persons living within its service territory who are reliant on electrically-operated equipment to sustain life, whether they are Con Edison customers or not, so that appropriate action can be taken in the event of an electrical outage. These particular mailings are part of a Company initiative that seeks the assistance of certain non-customer groups to help raise awareness of our LSE program. Earlier this year, we were able to secure a list of email addresses for over 11,000 doctors' offices and other medical providers in New York City and Westchester County, all of which will be sent LSE program information via email.

The Company has also begun providing Customer

News via email to customers who are not enrolled in

our electronic billing program ("e\*Bill"), but for

whom the Company has email addresses on file. This is

being done on an opt-out basis. A similar initiative

is being explored for the Company's "Your Rights and

Responsibilities" notices, which are sent annually to

all Con Edison customers. We feel that communicating

with customers via email and other electronic methods

1 is directly in line with the Company's goals to promote cost consciousness and environmental 2 3 stewardship, as well as to provide the best possible 4 customer experience. 5 Please discuss the Company's plans for enhancements to Ο. 6 the Company's customer-focused website. 7 Over the past year, several enhancements have been Α. 8 made to the Company's conEd.com website. Most 9 notably, the Company added a suite of online bill 10 analysis tools, known collectively as MyEnergyToolkit. 11 These tools break down a customer's energy consumption by end use (e.g., heating/cooling, refrigeration) and 12 can help customers determine which energy efficiency 13 14 upgrades would benefit them the most. The Company also developed an EV website for customers who have 15 16 questions about EVs, and an EnergyShare website aimed 17 at raising awareness and soliciting donations for the 18 Company's fuel fund, which offers \$200 grants to customers struggling to pay their winter heating 19 bills. The Company's major enhancements for 2012 and 20 beyond include: 21 22 A full redesign of the mobile version of 23 conEd.com and of our conEd.com/kids website; and

1 The launch of a mobile app for Apple iOS devices and Android devices. 2 3 Additionally, the Company continues making changes to 4 optimize the My Account and Customer Central sections 5 of the website based on focus group data, statistics from our own analytic tools and the results of 6 7 independent website reviews from organizations such as eSource. 8 9 Please explain the "Market Research and Customer and Ο. 10 Stakeholder Focus Groups" portion of the Company's 11 plan. 12 Earlier this year, we contracted a market research and 13 consulting firm to conduct two online focus groups. 14 The first centered on customers' perceptions of the 15 online billing and payment options offered by Con Edison and the factors that either motivate or 16 17 discourage customers from utilizing them. The second 18 was designed to gauge Con Edison's effectiveness at 19 communicating with customers during service outages 20 and other Company emergencies, as well as to determine 21 the types and frequency of communications that 22 customers prefer during these events. Focus groups of 23 this type are crucial to understanding the needs and

1 preferences of our customers and play an important role in the development of effective outreach and 2 3 education strategies, such as the changes to the My 4 Account and Customer Central portions of our website 5 noted above. Going forward, the Company plans to 6 conduct similar focus groups in order to develop 7 future strategies and to evaluate existing practices. Does the Company measure the effectiveness of the 8 Ο. 9 delivery of its messages? 10 Α. The Company conducts surveys twice a year to Yes. 11 gauge awareness and understanding of key messages. Have the survey results indicated your efforts have 12 Q. 13 changed customer behavior? 14 For example, our survey measured how customers Α. Yes. 15 planned to change their behavior as a result of our 16 messaging. Customers who recalled our messaging were 17 asked by interviewers what, if anything, they have 18 done differently over the past few months, or what they will do in the next few months to conserve energy 19 and save money in their households. The results 20 indicated that 80.4 percent of customers surveyed 21 indicated that, as a result of the Company's 22

1 messaging, they would do something differently to help conserve energy and save money. 2 3 What are the Company's plans for educating employees? Q. Employee education is critical to providing quality 4 Α. 5 customer care. The Company's employees must be 6 knowledgeable and have ready access to the information 7 that our customers desire. They must also possess the soft skills necessary to communicate this information 8 9 effectively. For this reason, we have begun 10 developing two eLearning (online) training modules. 11 One module is designed to educate employees on best practices for interacting with customers during 12 service outages and other Company emergencies. 13 14 other is aimed at promoting a customer-centric culture among all Company employees, including those who work 15 16 in positions that are not traditionally considered to 17 be customer-service related. 18 Q. Have you prepared or supervised the preparation of a 19 document listing the Company's planned expenses for general outreach and education programs? 20 We have prepared an exhibit entitled "OUTREACH 21 Α. Yes. AND EDUCATION, "Exhibit \_\_\_\_(CO-21). 22 23 MARK FOR IDENTIFICATION AS EXHIBIT \_\_ (CO-21)

1		MANDATORY HOURLY PRICING EXPANSION
2	Q.	What is the purpose of your testimony regarding the
3		Company's MHP Program?
4	Α.	The Company will describe its plan for MHP and explain
5		why it is proposing to maintain the threshold for
6		customer participation at 500 kW at this time.
7		The testimony also discusses the evaluative report the
8		Company filed in response to the Commission's
9		directive in its Order Setting Electric Rates in Case
10		08-E-0539. The report included an assessment of
11		expanding MHP to customers with demand of 500 kW or
12		less.
13	Q.	Please describe the Company's implementation of MHP.
14	A.	The Company implemented MHP to customers with a
15		maximum demand over 1500 kW in compliance with the
16		Commission's September 23, 2005 Order Instituting
17		Further Proceedings and Requiring the Filing of Draft
18		Tariffs in Case 03-E-0641, Proceeding on Motion of the
19		Commission Regarding Expedited Implementation of
20		Mandatory Hourly Pricing for Commodity Service ("MHP
21		Proceeding"), which directed the Company to implement
22		MHP for its largest customers then taking service

1		under mandatory time-of-use ("MTOU") rates. MHP was
2		implemented for these customers effective May 2006.
3	Q.	Did the Company expand MHP to additional customers?
4	Α.	Yes. In Case 07-E-0523, the Company requested
5		approval to expand the MHP program to all customers
6		with maximum demand of greater than 500 kW. The
7		Company's purpose was to increase the number of
8		customers that would have access to both hourly
9		commodity price and hourly usage information. In its
10		testimony in that case, the Company noted that its
11		proposal was consistent with Commission policy, as
12		stated on page 41 of the Order Denying Petitions for
13		Rehearing and Clarification in Part and Adopting
14		Mandatory Hourly Pricing Requirements, issued April
15		24, 2006, in Case 03-E-0641 ("April MHP Order"). In
16		the April MHP Order, the Commission concluded that,
17		through the implementation of hourly pricing, which
18		more accurately associates customer usage to the cost
19		of the electricity used as compared to conventional
20		energy pricing, customers would be encouraged to
21		reduce peak usage. In turn, this would provide the
22		societal benefits of mitigating peak period prices,
23		increasing peak period reliability, encouraging

- wholesale market power mitigation, and reducing New
- 2 York State's dependence on natural-gas-fueled
- 3 generation.
- 4 Q. What is the current status of MHP at Con Edison?
- 5 A. As of May 2011, MHP metering and a communications
- 6 medium has been provided to Con Edison customers with
- 7 billed demand greater than 500 kW. MHP commenced for
- 8 the Con Edison customers with billed demand greater
- 9 than 1,000 kW by November 2009 and for Con Edison
- 10 customers with billed demand greater than 1,500kW by
- 11 May 2006.
- 12 Q. How many customers are in each demand tier?
- 13 A. There are approximately 600 customers in the above
- 14 1,500 kW tier, approximately 350 customers in the over
- 15 1,000 to 1,500 kW tier, and approximately 1,300
- 16 customers in the over 500 to 1,000 kW tier. In total,
- 17 there are approximately 2,250 Con Edison customers
- 18 with billed demand greater than 500 kW that have
- interval metering installed and are eligible for MHP.
- 20 Q. How many of these customers are being billed under the
- 21 Company's MHP rate?
- 22 A. The majority of customers with billed demand over 500
- 23 kW are taking service from alternate suppliers and are

1 not being billed under the Company's MHP rate. 17%, or 374 customers, of the approximately 2,250 2 3 eligible customers are being billed under MHP. 4 Please describe the components of the Company's Ο. 5 program to educate customers and provide information 6 regarding the Company's MHP Program. 7 As part of its MHP expansion to all customers with Α. 8 maximum demand greater than 500 kW, the Company planned and executed an extensive outreach and 9 10 education program so that affected customers could fully understand and benefit from the implementation 11 12 This program includes letters to customers of MHP. prior to and following their conversion to the MHP 13 14 rate, as well as monthly bill messages. The letters and messages provide information on billing under the 15 16 MHP rate and how customers may have the ability to 17 more effectively manage their energy usage and costs 18 by developing a better understanding of their energy usage patterns and their financial impact. 19 20 Information is also provided on the Customer Care for 21 Energy Management website, which has a number of features, including customer access to data from the 22 meter and hourly prices from NYISO, as well as the 23

1 capability to schedule customized demand/price alerts and automatic e-mail delivery of usage reports. 2 3 Company has also created informational materials that include newsletters distributed to account holders and 4 5 interested parties regarding the MHP rate structure. Newsletters published for MHP customers include 6 information on the features of the Customer Care for 7 Energy Management website, reminders of how hourly 8 pricing works and how it can benefit customer, energy 9 10 efficiency tips, and various Company energy efficiency 11 programs. 12 Between 2009 and 2012, the Company also conducted a total of fourteen live customer forums and 13 14 information exchanges. These forums have included presentations on MHP pricing that inform customers how 15 16 to actively engage in monitoring their usage patterns 17 and price signals. The Company conducted 18 demonstrations on how the Customer Care for Energy Management website can be used in this effort. 19 20 Customers were shown simulations that demonstrate how 21 shifts in their energy usage toward off peak days/times have a direct benefit in lowering their 22 energy supply charges. These forums and information 23

- exchanges will continue to be conducted to regularly 1 communicate with this customer base and interested 2 3 parties on the impacts and potential benefits of the 4 MHP rate and resources available. 5 Ο. Why has the Company chosen to educate MHP customers in 6 this fashion? 7 The Company recognizes that it is important to Α. 8 communicate with customers through multiple media to 9 reach the largest number of customers, consultants, 10 ESCOs, and other interested parties as possible. Due 11 to the importance of the MHP initiative, the Company has utilized a multipronged communication approach 12 that includes print, web, and in-person meetings. 13 14 Please tell us more about the Customer Care for Energy Q. 15 Management web site. 16 Α. The Customer Care for Energy Management website 17 provides customers with interval-meter data for their 18 account. Customers can use this data to manage and reduce their electric costs. The system also has the 19 20 capability of sending automated price alerts to end
- 22 target threshold price for energy. The price alert

21

level is set by the customer on the website. These

users when the day-ahead price is expected to exceed a

1 tools allow customers to monitor price volatility and usage pattern anomalies, thereby providing them with 2 3 the information to make energy usage decisions that 4 can reduce costs. 5 Ο. Please describe other ways that customers receive 6 information about their billing under MHP pricing. 7 A dedicated email address has been developed for this Α. 8 purpose and provided to MHP customers so that MHP 9 customers have a convenient way to have their 10 questions and issues addressed. 11 Has the Company evaluated the impact of its MHP Ο. 12 Program? 13 Α. Yes. The Company contracted with KEMA to conduct this 14 evaluation of the MHP program and prepare a report, 15 which was filed with the Commission on May 1, 2012, 16 based on an extension of the deadline to file granted 17 by the Commission. KEMA described its efforts in its 18 report (Executive Summary, p. 1) as consisting of two 19 principal components: 20 • Impact Evaluation - The impact evaluation was a 21 quantitative analysis of the MHP program's impact 22 on customer's [sic] on-peak load, system peak 23 demand and off-peak energy consumption. In this 24 component, the project team conducted a rigorous analysis of up to seven years of hourly load 25 26 information for 272 current MHP full service

customers and 1,478 retail access customers.

27

1 2 3 4 5		<ul> <li>Process Evaluation - The process evaluation component focused on identifying the sentiments of current customers as well as those that have migrated to alternative suppliers. This aspect of the research used interviews with 107 customers.</li> </ul>
7	Q.	What were the findings of the impact analysis?
8	Α.	KEMA reported (id.) that
9 10 11 12 13		MHP had minimal impact on energy usage. The price elasticity modeling analysis estimated a difference in energy usage for all full service customers of less than 0.2% of the total energy subjected to MHP prices.
14		
15 16 17 18 19 20 21 22 23 24		The interval load data analysis determined that the off-peak energy use for the full service customers decreased slightly from 51.2% of the total annual energy use in 2009 to 50.9% in 2011. This is an indication that overall, customers are not exhibiting behavioral changes in reaction to price. In effect, customers are using slightly more of their energy during on-peak periods than they were in 2009.
26	Q.	What were the findings of the process evaluation?
27	A.	There were three key findings. KEMA reported
28		(Executive Summary, p. 2):
29 30 31		1) Just over half of the customers that remained on MHP (8% of total eligible) are actually aware that they are on the MHP rate.
32 33 34		2) Over half of the customers that are aware that they are on the MHP rate view energy prices on a daily basis.
35 36		3) Finally, about 3% of the customers that remained on MHP (0.4% of total eligible customers)

2		actually establish a maximum price threshold per kWh at which they would consider reducing load.
3	Q.	What do you conclude from KEMA's findings?
4	A.	The vast majority of participants are not viewing
5		prices daily and have not established a maximum price
6		threshold where they would be willing to reduce
7		demand, even though Con Edison has provided tools and
8		directions explaining how to do so.
9	Q.	What did KEMA find were barriers to customers'
10		reducing load during peak periods?
11	Α.	KEMA reported (Executive Summary, pp. 3-4):
12 13 14 15 16 17 18 19 20 21		Approximately 50% of the survey respondents indicated that they could not reduce energy during the high-priced period. This is a significant increase over the 15% who responded this way in the previous (2009) survey. In the current survey, 69% of customers cited barriers to their ability to shift loads or respond to price signals; the remaining 31% did not know their ability to shift loads or respond to price signals. The four primary barriers identified were:
22 23		<ol> <li>Insufficient resources to pay attention to hourly prices;</li> </ol>
24		2) Inflexible labor schedule;
25 26		<ol> <li>Managing electricity use is not a priority in the organization; and</li> </ol>
27 28		4) The cost of responding simply outweighs the savings benefit.
29 30 31		These barriers are similar to those noted in previous evaluations.

Have customers utilized the information and tools that 1 Q. 2 the Company has provided to reduce their peak load? 3 Based on the findings of the KEMA survey, the majority Α. 4 of MHP customers are not using the information and 5 tools available to them. KEMA reported (Executive 6 Summary, p. 5): 7 Although customer outreach activities were 8 conducted, generally, customers did not actively 9 engage in acquiring information about MHP. 10 During the transition period only 15% of full 11 service MHP respondents read CECONY customer 12 letters, newsletters and e-mails, 3% visited Con 13 Ed rates site and 9% contacted customer service. 14 Since beginning service on MHP rates, 76% of the 15 current full service MHP customers have taken no action towards acquiring information about MHP. 16 17 In addition, customers are not using the Customer Care 18 for Energy Management Website. According to the KEMA 19 report (Executive Summary, p. 4): 20 Customer survey results revealed that about 18% 21 of MHP full service customers have used the 22 website. Most use the website on a weekly basis 23 (33%) or less than once a month (33%); none use 24 it on a daily basis. Do customers feel that they have the information they 25 26 need to develop a strategy to respond to hourly 27 pricing signals? 28 As part of the KEMA evaluation, MHP participants were 29 asked if they had the information about MHP necessary 30 to develop a strategy to respond to hourly pricing

1 signals. According to the KEMA report (Executive Summary, p.5), the majority (68%) responded that they 2 3 required more information and indicated their interest 4 in having the Company provide more correspondence with customers, including providing more information about 5 6 hourly pricing. 7 What is the Company's plan to address the survey Ο. results regarding customers requiring more 8 9 information? 10 The Company will continue to focus on outreach and Α. education of the current class of MHP customers 11 12 throughout each year using multiple communication 13 In October 2012, a new, additional letter was media. 14 sent to MHP customers reminding them of the program's 15 features, tools and options available, and the potential opportunities to reduce their costs. 16 17 additional mailing will be done annually. We will 18 continue to conduct informational presentations at Customer and ESCO Forums with emphasis on how 19 customers can react to price signals to better manage 20 21 their energy usage and costs. We are considering the addition of a recurring webinar to the MHP 22 23 communication effort. This webinar would provide

step-by-step navigational instruction on the Customer 1 Care for Energy Management website and provide a new 2 3 platform for customers to have their questions addressed. Other communication options, such as email 4 5 notifications, will be evaluated for inclusion in the 6 communication plan. 7 Other than the challenges the Company has experienced Ο. relative to customer impact as detailed in the most 8 9 recent KEMA study, has the Company experienced any 10 other issues or concerns related to its expansion of 11 MHP? Interval metering presents complexities and 12 Α. challenges related to the need for daily remote 13 14 communications to retrieve hourly usage data. interval meter challenges are amplified due to the 15 16 characteristics of Con Edison's dense urban service 17 territory. A substantial percentage of the interval 18 meters are indoors and underground, necessitating that communications for each site be individually 19 engineered using an array of wireless solutions and 20 wired ("landline") telephone lines. Often landline 21 telephone lines are the Company's only option. 22

- Q. Please describe the difficulties that the Company
   experienced in communicating with its interval meters.
- 3 A. The reliability and consistency of interval data
- 4 transmission via a communication medium such as a
- 5 phone landline, wireless connection, or cable are
- 6 critical to provide timely, actual billing and to
- 7 provide customers with the information necessary to
- 8 manage their energy consumption effectively.
- 9 As of December 2012, Con Edison has installed
- 10 approximately 3,500 interval meters for MHP-eligible
- billing and online data presentment purposes. On
- average, we experience an 85% success rate in daily
- 13 communications.
- 14 Q. What are the causes of the communications problems
- that the Company has been experiencing?
- 16 A. The Company relies upon third-party telecommunication
- 17 providers for timely and successful installation and
- 18 repair of the communications medium (e.g., telephone
- 19 landline or cellular communication) and has
- 20 experienced a slow to unacceptable rate of
- 21 installation and repairs (after failures in the
- 22 communication medium) by the responsible telecom
- 23 company. The Company has worked closely with its

1 providers to improve this situation, but its telecom providers have indicated that the telephone landlines 2 3 that serve its interval-metered customers are not a 4 priority to them; therefore, it has been difficult to 5 make progress in improving the reliability of these 6 telephone landlines. 7 What other problems is the Company experiencing in Ο. communicating with its interval meters? 8 9 Α. We experience intermittent problems in the 10 transmission of data via wireless connection mostly 11 due to sub-ground meter locations. Is there an alternative technology that the Company 12 Q. can use to resolve these communications issues? 13 14 The Company has benchmarked other utilities with Α. 15 respect to interval meter communications. We found 16 that, although we use similar metering and 17 communication technologies as our peers, our unique 18 service territory make these technologies far less viable. 19 20 The Company has also explored new types of 21 communication solutions. Where wireless solutions are not viable, we currently employ cable companies to 22 23 communicate with several hundred meters through cable

1 service. We are also exploring new wireless technologies that are not traditionally used in 2 3 metering applications in order to determine whether 4 they are viable communications alternatives. These 5 studies and analysis are ongoing. 6 Please describe the customer impact of these Q. 7 technological and data communications challenges. The failures of interval data transmission may result 8 Α. in delayed and/or estimated billing of MHP accounts, 9 10 in part because manual, rather than automated, billing 11 is necessary. Equally as critical, failures result in interruptions in the display of daily interval usage 12 online via the Customer Care for Energy website. 13 14 MHP customer population predominantly operates large 15 commercial/industrial premises and, to a lesser 16 degree, large multiple dwellings and apartment These customers are sensitive to the 17 complexes. 18 impact of estimated bills, delayed bills and an inability to monitor their daily usage. 19 In addition, 20 many MHP customers are also customers of DR 21 aggregators, which compounds the criticality of daily data availability online and can create some customer 22 23 dissatisfaction when data are not available.

- What other impacts do these technological and data 1 Ο. 2 communication challenges present? 3 In light of the current level of data communication Α. 4 failures, the Company has increased its efforts in diagnostics, corrective action, and quality assurance. 5 Involved activities include diagnostic efforts to 6 ascertain the root cause of communications failures, 7 management and follow up for telecom provider action 8 9 for resolution of the telecommunications problem, 10 dispatch of field personnel to the location to manually download the meter data, generation of a bill 11 12 via manual calculation and processing by a SCSR, and response to customers, their consultants, advocates 13 14 and DR aggregators. These activities represent costs 15 above and beyond the costs estimated for MHP 16 implementation and maintenance in terms of meter purchases, meter installations, telecommunications 17 18 costs for data transmittal, and system maintenance
- 20 Q. Has the Company considered an expansion of the MHP
  21 program to customers over 300kW?

19

costs.

22 A. Yes. A reduction in the demand threshold for MHP to 23 300kW would make eligible an additional 1,600

1		customers. To equip them for hourly pricing, a total
2		of 2,000 meters would need to be exchanged and
3		replaced with interval meters with remote
4		communications. By applying historical data to these
5		volumes, Con Edison's preliminary cost estimate for
6		expanding the MHP Program to customers with demands
7		over 300kW is approximately \$9 million in capital
8		expenditures and \$3 million in annual O&M
9		expenditures.
10	Q.	What is the Company's plan regarding MHP going
11		forward?
12	Α.	The Company plans to continue its focus on the above
13		500kW MHP population in order to resolve the meter
14		data communications challenges associated with many of
15		its existing MHP customer locations. As well, the
16		Company will bolster outreach and education efforts
17		toward the goal of encouraging customers to react to
18		price signals and shift energy off-peak. For all of
19		the above reasons, the Company is not making a
20		proposal at this time to expand MHP to customers
21		between 300 and 500kW.
22		If the Commission nonetheless decides in this
23		proceeding to direct the Company to expand its MHP

- 1 Program, the Company should be permitted to adjust its
- 2 revenue requirement to reflect the above-described
- 3 incremental capital and O&M costs that the Company
- 4 would incur in serving additional customers under the
- 5 MHP Program.
- 6 Q. Does this conclude your testimony?
- 7 A. Yes.